

ABSTRACT

IDENTIFICATION OF BIOLOGICAL (MICRO)ORGANISMS BY DETECTION OF THEIR HOMOLOGOUS NUCLEOTIDE SEQUENCES ON ARRAYS

5

The present invention is related to an identification and/or quantification method of a biological (micro)organism or part of it (possibly present in a biological sample) by a detection of its nucleotide sequence among at least 4 other homologous sequences and comprising the steps of:

- possibly extracting original nucleotide sequences (1) from the (micro)organism;
 - amplifying or copying with a unique pair of primer(s), at least part of original nucleotide sequences (1) into target nucleotide sequences (2) to be detected;
 - possibly labelling said target nucleotide sequences (2);
 - putting into contact the labelled target nucleotide sequences (2) with single stranded capture nucleotide sequences (3) bound by a single predetermined link to an insoluble solid support (4), preferably a non porous solid support,
 - discriminating the binding of a target nucleotide sequence (2) specific of an organism or part of it by detecting, quantifying and/or recording a signal resulting from a hybridization by complementary base pairing between the target nucleotide sequence (2) and its corresponding capture nucleotide sequence (3),
- wherein said capture nucleotide sequence (3) being bound to the insoluble solid support (4) at a specific location according to an array, said array having a density of at least 4 different bound single stranded capture nucleotide sequences/cm² of solid support surface and

